Rapid Spacecraft Development Office News

May 2001

A Message from the Chief of the RSDO

This issue of our newsletter contains a number of significant RSDO news items. Perhaps the most important recent event is the completion of the second Rapid II On-Ramp. We have added four new buses, and one new vendor to our catalog through this innovative contract feature. Further details about the on-ramp and the new catalog options are included in this issue.

I would also like to take this opportunity to introduce a new member of the RSDO staff—Mark Baugh. Mark is serving as a Mission Integration Manager, and you can learn about his qualifications and previous experience in the related article.

In the CO's Corner, there is an interesting feature that examines the lessons we learned when exercising the Fair Opportunity To Be Considered clause contained in Rapid II. Also in that section is an article highlighting an RSDO presentation given in April at the Federal Acquisition Conference 2001, complete with a link allowing you to download a copy of the presentation, if you desire.

In addition, this issue contains articles concerning the NPOES Preparatory Project, RSDO's involvement with the Midex Announcement of Opportunity effort, and our participation in Goddard Technology Showcase 2001. We have also made significant updates to the RSDO Roadmap, which is available for readers to download.

Finally, you may have noticed the recent news reports about a national robotics competition that was held for high school students. Several NASA and contractor personnel assisted local high school teams in this competition. I was fortunate enough to take part in this event; a brief account of our adventures is also found in this issue.

As always, please feel free to contact me via email (bill.watson@gsfc.nasa.gov) or telephone (301.286.1289) if you have any comments or questions regarding RSDO business.

Bill Watson/RSDO Chief

Staffing Updates

Meet Mark Baugh - The Newest Member of the RSDO Team

Mark joined RSDO in February 2001, as a Mission Integration Manager. He holds a B.S. in Electrical Engineering from the University of Massachusetts, and a Masters degree from Howard University in the same discipline. Mark began work at Goddard in 1986, as Test Conductor for the Cosmic Background Explorer (COBE) Differential Microwave Radiometer Instruments. Since then, Mark has worked on a number of different projects, including positions as:

- RF Communications Subsystem Manager for the International Solar Terrestrial Physics Project's WIND and POLAR satellites (1986-1995)
- RF Communication Subsystem Lead for the Tropical Rainfall Measuring Mission (1988-1998)
- RF Communications Engineer for the Integrated Mission Design Center (1998-1999)
- Integration and Test Manager for the Hubble Space Telescope Carrier Development Program (1999-2001)

Mark has successfully managed several subsystem design and development efforts for large spacecraft, and has over 15 years of systems engineering and technical management expertise. In addition, Mark has served on numerous design reviews, source evaluation boards, configuration control boards, and annual review panels for NASA (including the International Space Station Independent Annual Review). As is evidenced by his assignments, Mark's experience spans the entire project life cycle, from project formulation, to implementation, to operations. Welcome to RSDO, Mark!

The Contracting Officer's Corner

Fair Opportunity To Be Considered (FOTBC) - Lessons Learned

FOTBC is available in the RSDO Rapid II Contract. Paragraph (a) of Clause I.A.7 “Ordering Procedures” states, “the government will provide all awardees a fair opportunity to be considered. This may be provided through the Government’s examination of existing information and contract documents already in the Government’s possession.” Simply stated, FOTBC is a process whereby the Contracting Officer uses all available in-house information to determine award of a delivery order(s) to source(s) under the Rapid II Contract. In-house information can consist of responses to Requests For Information (RFIs), Final Reports submitted under a Delivery Order, Rapid II spacecraft proposals, or any other information deemed necessary to complete a fair evaluation. Only available in-house information can be used. If a vendor has not "on-ramped" a bus that could match a particular mission’s requirements, that bus cannot be evaluated, since it is not apart of the Rapid II Contract.

FOTBC is a form of competition. Past performance and price are both included in the evaluation of offerors. After evaluation, an estimated price for the needed item will be offered to the chosen vendor. The vendor has the right to refuse the work. If a single award is warranted and a vendor refuses the work, the RSDO will proceed to the next most qualified vendor for award, until acceptance of a delivery order.

The RSDO learned several lessons through implementation of FOTBC in the above mentioned examples: 1) the FOTBC process only works when technical and price requirements are well defined, 2) the process works especially well for the award of studies, and 3) a reasonable price must exist to successfully use the FOTBC process.

We also believe it may be a disadvantage to both the government and the vendor to use the FOTBC process for Contingent Delivery Order of a spacecraft for a MIDEX, SMEX, or ESSP AO candidate. All parties will be better served if vendors are allowed to submit proposals. Vendors will then be able to propose prices for the missions, and to propose buses which have not been "on-ramped," as long as a credible path for "on-ramping" is shown.

The RSDO welcomes feedback regarding the FOTBC process. Please email the author (jedmond@pop200.gsfc.nasa.gov) with your comments.

By Jerry P. Edmond/RSDO Contract Specialist

RSDO Representative Attends Procurement Executive's Council Meeting

On April 18, Jerry Edmond/RSDO Contacts Specialist attended the Federal Acquisition Conference 2001 in Washington, D.C. The conference was designed to facilitate the exchange of information and ideas among civil service procurement professionals. During the conference, Jerry gave a presentation titled, "RAPID SPACECRAFT ACQUISITION: Lessons Learned in Commercial Contracting."

The presentation summarizes the role and purpose of the RSDO and describes the unique services it provides to its customers. A brief explanation of the Rapid Spacecraft Acquisition (RSA) and Quick Ride programs is followed by a more detailed comparison of the now-expired Rapid I contract vehicle vs. the current Rapid II contract vehicle. Administrative issues such as changes clauses, warranty/guarantee concerns, finance payments, and incentive fees are described. Finally, the presentation includes a discussion of comments collected from RSA vendors, regarding the advantages and disadvantages of both Rapid I and Rapid II.

To download a pdf file containing Jerry's presentation, please visit
http://rsdo.gsfc.nasa.gov/newsletter/docs/rsdo.pdf

Don't Forget...

Please remember to consider small or disadvantaged businesses when selecting your new subcontractors. Making this effort may even enable you to meet the Small and Disadvantaged Business (SDB) goals contained in your RSA IDIQ contract.

New Business

- **NPP Formulation Phase Studies Underway**
- **RSDO Supports the Midex AO Cycle**

NPP Formulation Phase Studies Underway

The National Polar-orbiting Operational Environmental Satellite System (NPOESS) Preparatory Project (NPP) is a joint mission of the National Aeronautics and Space Administration and the NPOESS Integrated Program Office [IPO is a tri-agency organization composed of representatives from the National Oceanographic and Atmospheric Administration (NOAA), the Department of Defense, and NASA]. Planned for launch in 2005, NPP provides critical climate research observations bridging the Earth Observing System (EOS) Terra and Aqua missions and the NPOESS missions, and provides risk reduction validation of for three of four critical sensors on the NPOESS missions.
All NPP instruments have now been down-selected, and are proceeding with detailed design work leading to Critical Design Reviews planned for 2001. ATMS was awarded in November 2000 to GenCorp Aerojet of Azuza, CA. VIIRS was awarded in December 2000 to Raytheon Santa Barbara Remote Sensing of Goleta, CA. CrIS was awarded in August 1999 to ITT Industries of Ft. Wayne, IN.

Work on the definition of the NPP spacecraft began in May 2000, with the issuance of delivery orders under Rapid II for five feasibility studies (each lasting four months and valued at $150K). These feasibility studies were completed by Ball Aerospace, Lockheed Martin, Orbital Science Corporation, SpectrumAstro, and TRW.

Following the feasibility studies, two formulation phase study delivery orders (also under Rapid II) were issued in February 2001 to Ball Aerospace and SpectrumAstro. These 10 month, $3M studies place specific emphasis on accommodating the NPP instruments. A Preliminary Requirements Review has been completed, and work is proceeding towards System Design Review and Preliminary Design Review. Current planning anticipates release of the implementation phase RFO in December 2001, with award in March 2002.

By Ray Taylor/GSFC Code 420

RSDO Supports the Midex AO Cycle

The RSDO has been fielding inquiries from principal investigators planning to bid the Midex Announcement of Opportunity (AO). Most are interested in receiving an estimated price range, to see if their concept fits within the anticipated Midex cap of $180M. Many want to identify industry partners to collaborate in the Midex proposal preparation effort.

The RSDO suggests two courses of action for Midex candidates. The Request for Information (RFI) is a way to test the marketplace to determine if there is a catalog bus that could accommodate the candidate payload. Our vendors have limited bid and proposal budgets, and they realistically consider the RFI—weighing both the likelihood that the mission will win the AO, and the probability of the vendor winning a future Request for Offer (RFO). Vendors are under no obligation to respond to an RFI, and the quality of responses seems to be proportional to the thoughtfulness of the candidate inquiry.

The contingent RFO is a solicitation by the candidate for an RSDO vendor to provide a spacecraft, contingent upon the candidate being selected under the AO process. This effectively partners the candidate with an RSDO vendor. The multi step delivery order is open for 300 days, and the selected vendor helps in AO proposal preparation in anticipation of future award. The delivery order is only executed if the candidate proposal is selected in the AO process.

The table below contains a summary of current Midex candidates that have utilized RSDO services, and future Midex candidates that could take advantage of our offerings.

Mission	Description	RSDO Status	Vendor
Recent Past			
Kronos	Midex competition contingent delivery order	FOTBC awd	SA - contingent
Auroral Lites	Midex competition contingent delivery order - 5 spacecraft	RFO awd	OSC - contingent
VIRGO	Midex candidate	RFI on 4/30 RFO soon	
Future			
MTC	Midex candidate	RFI in work	
OPUS	Midex candidate		
SIRCE	Midex candidate		

Notes: *FOTBC - Fair Opportunity To Be Considered* *SA - Spectrum Astro* *OSC - Orbital Sciences Corporation*

By Bill Watson/RSDO Chief

RSDO Road Map

The RSDO Roadmap illustrates RSDO's current mission involvement along with information regarding future NASA and non-NASA unmanned missions. RSDO and its customers can use the roadmap to identify and plan for potential business opportunities. Several modifications have been made to the RSDO Roadmap since the last update in January. Below are a few of the major items included in the new version:

- Updates to mission launch and implementation dates to coincide with those specified in the SOCB Approved SOMO Mission Set (3/15/01)
- Addition of Carbon Cycle Initiative (CCI) missions (launches beginning in 2007)
- Updated ESSP, UnESS, and Explorers Program AO release schedules
- Ongoing or tentative RSDO studies planned over the next several years for the Carbon Cycle Initiative (CCI), Constellation X, Gamma-ray Large Area Space Telescope (GLAST), Geospace Electrodynamics Constellation (GEC), Global Precipitation Measurement (GPM) Constellation, Magnetospheric Constellation (MC), Magnetospheric Multiscale (MMS), and NPOESS Preparatory Project (NPP)
- New upcoming events in the 'Conferences and Symposiums' section
- Co-hosted display by RSDO and Access to Space at the GSFC Technology Showcase in June

You can review these updates and more on the current RSDO Roadmap in Portable Document Format (PDF) by visiting http://rsdo.gsfc.nasa.gov/newsletter/roadmap1.htm.

By David Bissett/BA&H

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